

The Modern Building

OPTIONS CONSIDERED

ERIC STRAFELDA, JORDAN TIMMERSMAN, TYLER MITCHELL

INTRODUCTION:

Our project includes the full electrical design and specification of a new 300,000 square foot library on the NDSU campus. The architectural design was done by a former NDSU student. Ankit Rauniyar created the design for his architecture thesis project and is now employed by Zerr Berg Architects in Fargo. It provides excellent commercial value to the University, should NDSU want to try and push a new library through congress as they could say they have a student designed building. It will also save energy in unique and efficient ways as it will be designed to LEEDS Platinum standards, including a state of the art lighting control system.

This project would be very beneficial for all of us going forward. It would provide experience in a number of different ways that we would otherwise not have the opportunity to receive. Those opportunities include:

- Extensive work with the National Electrical Code (NEC)
- Design work using AutoCAD and Revit 3D MEP
- Experience with the LEEDS Accreditation Platform
- Use of the Construction Specifications Institute (CSI) MasterFormat
- Experience working with an architect and his design
- Energy Efficiency studies
- Creation of a website to share our design with the public or groups to follow

PREVIOUS WORK:

The previous work related to this project comes from people in industry who design the electrical systems of buildings for a living. We will be reaching out to some individuals for advice throughout our design process. There are no patents, trademarks, or previous senior design projects related to our project.

SELECTED APPROACH:

We have selected a design approach that follows industry standard when it comes to designing buildings. Due to the unknown nature of our project we have also come up with several items to work on should we complete our project ahead of schedule. Those options are listed in the following sections.

DESIGN OPTIONS:

The design options is actually a major portion of our project. We will be researching different types of materials to be used in the building and the final selections will be listed, and specified for installation in our final documentation.

Those options would be to first off minimize the power usage in our building. Using state of the art technology while considering affordable prices to implement a reliable, safe and cost effective design. This should bring a highly functional, aesthetically pleasing green space to the NDSU campus.

We did have some research done about how to present our information online. So we have looked at a few website host/editor(s) and compared them below.

Webs

Pros

- Requires no technical knowledge
- Easy drag and drop titles/picture insert
- Free
- Mobile Website

Cons

- 40 MB storage
- No Group editing
- Mobile website ads
- No custom domain name

Weebly

Pros

- Requires no technical knowledge
- Easy drag and drop titles/picture insert
- Free
- Mobile Website
- 100 + professional themes
- No ads
- Group Editing
- Full HTML Control

Cons

- Unknown storage
- Cost for custom domain name

After looking at both hosts despite the fact the neither could provide us with a free custom domain name and that Weebly did not specify a storage limit. We decided to go with Weebly for its group editing abilities, custom themes and easy use. We will also be creating a Prezi presentation to embed in our website.